"JRPPM"
"JURNAL RISET PENDIDIKAN MULTIDISIPLIN DAN PENGABDIAN KEPADA MASYARAKAT"

Homepage: https://cermat.co/index.php/jrppm/index
E-mail: ronipasla20@gmail.com

ISSN 3109-2357
Vol.2 No.1 Page 28-30

Integration of Islamic Values and Science-Technology Ethics in the Formation of Islamic Behavior

Fatima Zulfa[1], Sinta[2], Anggun Desta Maharani[3], Alihan Satra[4]
[1234]Raden Fatah State University, Palembang, South Sumatra, Indonesia
Corresponding Author: Fatima Zulfa, e-mail: Fatimahzulfa258@gmail.com

Published: Juni, 2026

ABSTRACT
The study purpose was *to examine how Islamic values can be integrated with the ethics of science and technology to foster Islamic behavioral attitudes in daily life.* ***Materials and methods.*** *This study uses a library research method. Data were collected from various scientific sources including journals, books, and articles related to the integration of Islamic values in the fields of science and technology. Data analysis was conducted using a descriptive-qualitative approach by elaborating, describing, and synthesizing information from various literature sources.* ***Results.*** *Islamic values—such as tawhid as the foundation of knowledge, honesty, responsibility, and the principle of maslahah—provide a comprehensive moral framework for guiding the development and use of technology. Integration of these values in education and daily life can shape responsible, ethical, and spiritually grounded individuals.* ***Conclusions.*** *The integration of Islamic values with scientific and technological ethics is not merely an academic concern but a necessity for forming a generation that is intellectually capable and morally sound in facing the challenges of the digital era.*

Keywords: *ethics of technology; integration of islamic values; islamic behavior; science and technology; tawhid*

INTRODUCTION

The development of science and technology in the modern era is progressing at an extraordinary pace and has a significant impact on various aspects of human life. This progress not only facilitates human activities but also presents new challenges, particularly in the aspects of ethics and morality. In the context of education and social life, there is often a gap between technological development and the application of moral and spiritual values, making an approach that can balance the two a pressing necessity (Rahman, 2022).

Islam as a comprehensive religion provides guidance not only in matters of worship but also in the development of science and technology grounded in ethical values. The integration of Islamic values in technological development is important so that the progress achieved remains within the boundaries of moral and spiritual principles. Values such as honesty, trustworthiness, and responsibility need to be internalized in the use of technology to prevent negative impacts on human life (Huda & Aziz, 2021).

The integration of Islamic values with science and technology also plays a role in shaping individual character and behavior. The application of these values in both the learning process and everyday life has been proven capable of building Islamic attitudes, such as ethics in communication, the wise use of technology, and the formation of good character in the digital era (Sari & Munir, 2023; Nasution, 2020b).

This article aims to: (1) explain the concept of integrating Islamic values in science and technology; (2) describe the role of ethics in the development of science and technology; (3) explain how to integrate Islamic values with the ethics of science and technology; and (4) describe how such integration can shape Islamic attitudes and behavior in daily life.

METHOD

This study uses a library research method. Data were collected from various scientific sources including journals, books, and articles related to the integration of Islamic values in the fields of science and technology and the formation of Islamic behavior. The sources used are primary and secondary sources relevant to the topic of discussion.

Data analysis was conducted using a descriptive-qualitative approach by elaborating, describing, and synthesizing information from various literature sources. The research steps include: (1) identification and collection of literature sources; (2) selection of sources based on relevance to the topic; (3) analysis and synthesis of data; and (4) systematic presentation of research findings in accordance with the research questions.

FINDING AND DISCUSSION

The Concept of Integrating Islamic Values in Science and Technology

The integration of Islamic values in science and technology is an effort to unite modern knowledge with Islamic teachings sourced from the Qur'an and Hadith, so that there is no separation between religious sciences and general sciences. In this concept, science is not only oriented toward rational and empirical aspects but is also guided by spiritual and moral values so that its use remains in accordance with Islamic principles (Saiful, 2023).

This integration aims to eliminate the dichotomy of knowledge that has long existed in the world of education, where religious sciences are separated from general sciences. In the Islamic view, all knowledge comes from Allah SWT, so there is no fundamental difference between the two. Through this integration, science is seen as a means of drawing closer to Allah as well as a tool for providing benefit to human life (Sutrisno, 2022).

Furthermore, the integration of Islamic values also emphasizes a harmonious relationship between reason and revelation. Reason is used to understand natural phenomena and develop knowledge, while revelation serves as a guide to prevent knowledge from deviating from the values of truth. This integration also has important implications in education, where the learning process focuses not only on cognitive aspects but also on affective and spiritual ones, so that it is expected to produce a generation that is not only intellectually brilliant but also morally and spiritually strong in the face of the challenges of the times (Hidayat & Rahman, 2021).

The Role of Ethics in the Development of Science and Technology

Ethics plays a very important role in the development of science and technology as it serves as a guideline for directing the use of technology so that it continues to provide benefits for humanity. Rapid technological development often emphasizes efficiency and progress; however, without ethics, this can lead to various negative impacts such as the misuse of technology, environmental damage, and social inequality (Azmi & Abidin, 2024).

Ethics also acts as a control mechanism in dealing with various challenges arising from the advancement of science and technology, such as the misuse of information, privacy violations, cybercrime, and the spread of misinformation. Without ethics, technology can be used irresponsibly and cause harm to many parties (Sendika, Fatimah, & Fitrisia, 2024).

From an Islamic perspective, ethics has a broader role because it regulates not only human relationships with one another but also with Allah SWT. Values such as amanah (trustworthiness), shiddiq (honesty), 'adl (justice), and maslahah (public welfare) form the basis for the use of technology. This demonstrates that Islamic ethics can provide a comprehensive moral framework for facing the challenges of modern technology, including the development of artificial intelligence (AI) and digital technology (Ramadhani, Mardian, & Rofiqon, 2024). Ethics also functions as a balance between technological progress and human values to ensure that technology continues to be used to improve the quality of human life (Nasution, 2020a).

Ways to Integrate Islamic Values with the Ethics of Science and Technology

The integration of Islamic values with the ethics of science and technology can be carried out through several systematic steps. First, making tawhid (monotheism) the primary foundation of knowledge. In Islam, tawhid is the basis for the development of science so that knowledge is not value-free. Every scientific activity must be grounded in the conviction that knowledge comes from Allah and is used for purposes pleasing to Him (Rahayu, Nurhasanah, & Fauzi, 2025).

Second, connecting scientific concepts with the Qur'an and Hadith. The integration of science with Islamic sources aims to ensure that learning is not only rational but also spiritual, thereby enhancing both faith and scientific understanding (Rosita, Marlina, & Setiawan, 2024). Third, instilling moral values in the use of technology. Values such as honesty and responsibility are essential in the digital era to prevent the spread of misinformation and online fraud (Hanifiyah & Nasrodin, 2021).

Fourth, integrating Islamic values into the education system as the primary means of character development. Schools and universities play an important role in shaping students to be not only academically excellent but also ethical (Anggraini, Lestari, & Iqbal, 2025). Fifth, avoiding the dichotomy between religious and general sciences, since both originate from the same source and must complement each other (Septia, Aisyah, & Prasetyo, 2024).

Sixth, using science and technology for the welfare of society, where technological development should focus on the fields of health, education, and economics (Monoarfa, Saputra, & Hidayat, 2024). Seventh, applying the principles of Islamic ethics in research and innovation by upholding honesty and responsibility to prevent plagiarism and data manipulation (Rahayu et al., 2025). Eighth, controlling the negative impacts of technology through religious values as moral boundaries (Hanifiyah & Nasrodin, 2021). Ninth, developing technology in accordance with halal principles and Islamic ethics (Anggraini et al., 2025). Tenth, cultivating awareness of responsibility as stewards of the earth so that technology is used wisely and does not harm the environment (Septia et al., 2024).

Integration in Shapping Islamic Attitudes and Behavior in Daily Life

The integration of Islamic values in science and technology not only impacts the cognitive dimension but also plays an important role in shaping Islamic attitudes and behavior in daily life. This occurs because Islamic values that are internalized through the learning process and the use of technology will influence how a person thinks, behaves, and acts.

First, this integration shapes a sense of responsibility and trustworthiness. In Islam, every piece of knowledge one possesses is a trust from Allah that must be used as best as possible, making a person more careful in using technology (Hanifiyah & Nasrodin, 2021). Second, it fosters honest and ethical behavior in the digital world, where the value of honesty encourages individuals to be more aware of using technology wisely and responsibly (Anggraini et al., 2025).

Third, it cultivates discipline and wisdom in the use of technology. Islamic values teach balance in life so that technology is used proportionally and not excessively (Septia et al., 2024). Fourth, it builds good character in social interactions, where values of courtesy and respect guide individuals to communicate ethically and respectfully in both physical and digital environments. The internalization of Islamic values therefore serves as a holistic foundation for forming individuals who are not only knowledgeable but also morally upright in their daily conduct.

CONCLUSIONS

Based on the discussion presented, the rapid development of science and technology provides a major impact on human life, bringing both convenience and challenges in ethical and moral aspects. Therefore, the integration of Islamic values is essential so that knowledge is not value-free but remains within the boundaries of religious teachings. This integration can be carried out by making tawhid the primary foundation, connecting knowledge with the Qur'an and Hadith, instilling moral values in the use of technology, and avoiding the dichotomy between religious and general sciences.

The application of Islamic ethics in research, education, and the use of technology is necessary so that knowledge can provide broad benefits without causing harm. The integration of Islamic values with the ethics of science and technology is expected to create a balance between technological progress and moral and spiritual values, enabling human beings to fulfill their role as stewards of the earth responsibly and to embody Islamic attitudes and behavior in their daily lives.

REFERENCES

Anggraini, K., Lestari, R., & Iqbal, M. (2025). Integration of Islamic values in learning. JPST Journal, 15–23.

Azmi, K., & Abidin, Z. (2024). Rationality and ethics in technology development: A philosophy of science review. Journal of Philosophy of Science, 12(1), 10–20.

Hanifiyah, F., & Nasrodin. (2021). Implications of IMTAQ and IPTEK integration in education. FAJ Journal, 8(2), 67–75.

Hidayat, T., & Rahman, A. (2021). Integration of Islamic values in learning. Journal of Islamic Education, 10(1), 70–85.

Huda, M., & Aziz, A. (2021). Islamic ethics and the challenge of modern technology. Journal of Islamic Studies, 9(1), 60–75.

Monoarfa, M., Saputra, A., & Hidayat, R. (2024). Integration of cultural values and science and technology in the curriculum, 1–10.

Nasution, S. (2020a). Ethics and responsibility in technology development. Journal of Social Humanities, 2, 90–100.

Nasution, S. (2020b). Integration of IMTAQ and IPTEK in shaping student character. Journal of Islamic Education, 2, 100–110.

Rahayu, S., Nurhasanah, S., & Fauzi, A. (2025). Integration of Islamic values in learning. JPTAM Journal, 14, 11245–11252.

Rahman, M. (2022). Islamic ethics and the development of modern technology. Journal of Islamic Studies, 18(2), 110–122.

Ramadhani, P. W., Mardian, R., & Rofiqon, M. H. (2024). The role of Islamic values in the ethics of modern science and technology. Islamika Journal, 7(1), 60–68.

Rosita, D., Marlina, R., & Setiawan, B. (2024). Integration of Islamic values in science learning. Pendas Journal, 9(3), 2345–2353.

Saiful. (2023). Integration of science and technology in the perspective of Islamic education. Journal of Islamic Education, 5(1), 40–52.

Sari, N., & Munir, M. (2023). Shaping Islamic character through digital technology. Journal of Character Education, 13(1), 85–95.

Sendika, M., Fatimah, S., & Fitrisia, A. (2024). Integration of ethics in the advancement of science and technology: Challenges and opportunities. Journal of Education, 11(2), 215–225.

Septia, R., Aisyah, N., & Prasetyo, B. (2024). Islamic education strategies in the era of modernization. Pendas Journal, 9(2), 1789–1797.

Sutrisno. (2022). Integration of science and religion in the Islamic perspective. Journal of Islamic Studies, 6(1), 25–38.